

RECEIVED
CENTRAL FAX CENTER
MAY 29 2009

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Reichert
Serial No: 09/775,074
Filed: 2/1/2001
For: Muntin Bars for Simulated Divided Lite Windows
Docket: 1663-I-CIP
Examiner: A. Phi Dieu Tran
Art Unit: 3633
Conf. No. 8012

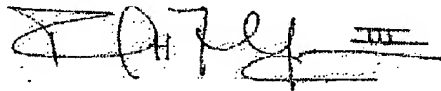
Mail Stop Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF

Sir:

This is an appeal to the Board of Appeals from a non-final Action dated July 25, 2008, of claims 23-26, 30, 32, 33, 36-39, 41-49, 69, and 71-74 in application serial no. 09/775,074.

The Applicant respectfully requests the entry and consideration of this Appeal Brief. The Applicant respectfully requests a decision in favor of the allowability of the claims.



Fred H. Zollinger, III

Reg. No. 39,438 06/01/2009 PSOUVANN 00000007 09775074

Zollinger & Burleson, PC 2002

270.00 0P

P.O. Box 2368
North Canton, OH 44720
Telephone: (330) 526-0104
Facsimile: (866) 311-9964
Attorney Docket: 1663-I-CIP

CERTIFICATE OF MAILING

I hereby certify that this appeal brief is being submitted via facsimile transmission to:

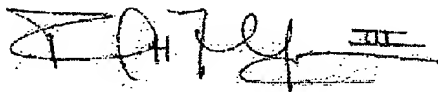
Mail Stop Appeal Brief-Patents

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450,

on this 29th day of May, 2009.



Fred H. Zollinger, III, Reg. No. 39,438

TABLE OF CONTENTS

| | |
|--|----|
| (i) Real party in interest | 4 |
| (ii) Related appeals and interferences | 5 |
| (iii) Status of claims | 6 |
| (iv) Status of amendments | 7 |
| (v) Summary of claimed subject matter | 8 |
| (vi) Grounds of rejection to be reviewed on appeal | 11 |
| (vii) Argument | 12 |
| (viii) Claims appendix | 19 |
| (ix) Evidence appendix | 26 |
| (x) Related proceedings appendix page | 27 |

(i) Real Party in Interest.

This patent application is owned by Edgetech I.G., Inc. of Cambridge, OH.
(www.edgetechig.com) Edgetech I.G., Inc. is affiliated with Lauren International, Inc. of
New Philadelphia, OH. (www.laureninternational.com)

(ii) Related Appeals and Interferences.

There are no related interference procedures presently pending or contemplated.

(iii) Status of Claims.

Claims 23-26, 30, 32, 33, 36-39, 41-49, 69, and 71-74 are pending. Claims 23-26, 30, 32, 33, 36-39, 41-49, 69, and 71-74 are rejected and appealed.

Claim 27 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 1-22, 28-29, 31, 33-35, 40, 50-68, 70, and 75 are canceled.

(iv) Status of Amendments.

The Applicant filed an Amendment After Notice of Appeal under 37 CFR § 41.33(a) on April 29, 2009. The Amendment is available on Public PAIR and appears to have been entered. All other amendments have been entered.

(v) Summary of Claimed Subject Matter.

A simulated divided lite glazing unit has an inner muntin grid disposed in the insulating chamber defined by a pair of glass sheets and a perimeter spacer. Inner and outer muntin grids are aligned with the inner muntin grid to create the appearance of true divided lite windows with the alignment of all three grids. The invention relates to the structure of the muntin grid pieces that are used to form the inner muntin grid. These muntin grid pieces are formed from inner and outer muntin grid elements. The claimed inner and outer muntin grid pieces have an outer muntin grid element that hides the inner muntin grid element from view. This configuration allows the inner muntin grid element to be made from an inexpensive, unattractive, structural material while the outer muntin grid element is made from a more attractive material. This configuration avoids the step of finishing and painting the inner muntin grid element. Creating muntin grid pieces in this manner also allows the outer muntin grid element to be desiccated in order to increase the amount of desiccant in the simulated divided lite glazing unit. The outer muntin grid element may be configured to fill more space than the inner muntin grid element to improve the divided lite appearance of the glazing unit. The flexible nature of the outer muntin grid element allows it to be rather larger without fear of its interference with the glass.

Independent claims 23, 26, 36, 39, and 69 recite the structure of a simulated divided lite insulating glazing unit having first and second spaced glass sheets (18 and 20) spaced apart by a perimeter spacer (22) to define an insulating chamber. This structure is described on pages 11 and 12 of the specification and is depicted in FIGS. 1-3 and FIG. 10. Independent claim 44 recites the structure of a combined inner and outer muntin grid elements.

Independent claim 23 requires the unit to have an internal muntin bar grid (406) disposed inside the insulating chamber. The internal muntin bar grid (406) has a plurality of inner muntin grid elements (402, 502 – See FIGS. 27-42) that each has a longitudinal direction. The grid also has a plurality of flexible, collapsible outer muntin grid elements (404, 408, 416, 422, 442, 446, 500) that each has a longitudinal direction. The inner muntin grid elements (402, 502) are arranged in a grid that defines the

pattern of the internal muntin bar grid (406). Claim 23 requires the outer muntin grid elements to surround the inner muntin grid elements to completely hide the inner muntin grid elements from view.

Independent claim 26 requires the unit to have an internal muntin bar disposed inside the insulating chamber with the internal muntin bar extending away from the perimeter spacer to divide the insulating chamber into separate portions to provide a divided-lite appearance to the glazing unit. The claim requires the internal muntin bar to have an inner muntin grid element (402, 502 – See FIGS. 27-42) and a flexible, collapsible outer muntin grid element (408, 422, 446). The outer muntin grid element substantially surrounds the inner muntin grid element to hide the inner muntin grid element from view on both sides of the insulating glazing unit. Claim 26 requires the outer muntin grid element to define a longitudinal slit (410 in FIG. 27B, page 29 of specification; 424 in FIG 27D, page 30 of the specification; 448 in FIG. 27G, page 31 of the specification, and FIG. 31, pages 31-32 of the specification) that allows the outer muntin grid element to be opened and wrapped around the inner muntin grid element.

Independent claims 36 and 39 require the unit to have an outer muntin grid element (408, 422, 446) that surrounds an inner muntin grid element (402, 502 – See FIGS. 27-42). The outer muntin grid element is a tube. The claims require the tube to define a slit (410 in FIG. 27B, page 29 of specification; 424 in FIG 27D, page 30 of the specification; 448 in FIG. 27G, page 31 of the specification, and FIG. 31, pages 31-32 of the specification) that allows the tube to be wrapped around the inner muntin grid element.

Independent claim 44 recites the structure of a combination of an inner muntin grid element (502 – See FIGS. 37-42) and an outer muntin grid element (500). The outer muntin grid element is adapted to fold around the inner muntin grid element. The claim requires the body of the outer muntin grid element (500) to define one corner notch (506) for at least three of the corners of the inner muntin grid element (502). The corner notches are spaced apart to align with the corners of the inner muntin grid element (502) when the body is wrapped around the inner muntin grid element (See FIGS. 37-42, pages 33-34 of the specification).

Independent claim 69 requires a simulated divided lite insulating glazing unit to have an internal muntin bar grid having a plurality of inner muntin grid elements (402) and a plurality of outer muntin grid elements (404, 416, 442). The claim requires each of the outer muntin grid elements (404, 416, 442) to be a unitary tube having a continuous sidewall that encloses a length of an inner muntin grid element longitudinal edges and longitudinal sides to hide the longitudinal edges and longitudinal sides of the enclosed portion of the inner muntin grid element from view on both sides of the insulating glazing unit.

Claim 30 requires an outer muntin grid element to have a protruding foot 418 (FIGS. 27C-E described at page 30 of the specification). The foot 418 fills more of the gap between the glass sheets.

Claim 33 requires the outer muntin grid elements of claim 23 to be in the form of tubes that are collapsible. Exemplary tube configurations are shown in FIGS. 27 and 34-36.

Claim 42 requires the outer muntin grid element to have ends 414, 508 that are angled away from each other as shown in FIGS. 27B, 27D, 27G, and 40. These angled ends help close the slit tubes as described at page 29 of the specification.

(vi) Grounds of rejection to be reviewed on appeal.

The new issues set forth in the office action dated July 25, 2008, are:

(A) Whether claims 23, 26 and 30 are anticipated under 35 U.S.C. § 102(b) by 4,567,710 to Reed.

(B) Whether claims 24, 25, 36-39, 41-43, 69, and 71-73 are obvious under 35 U.S.C. § 103(a) over Reed in view of US 5,345,743 to Baier.

(C) Whether claims 32-33 are obvious under 35 U.S.C. § 103(a) over Reed.

(D) Whether claims 44-46 and 49 and 74 are obvious under 35 U.S.C. § 103(a) over Reed in view of US Patent 5,351,459 to Kassl et al.

(E) Whether claims 47-48 are obvious under 35 U.S.C. § 103(a) over Reed in view of US Patent 5,351,459 to Kassl et al. in further view of Baier.

(vii) Argument.

A. Claims 23, 26 and 30 are not anticipated under 35 U.S.C. § 102(b) by 4,567,710 to Reed.

Claims 23, 26 and 30 stand rejected under 35 U.S.C. § 102(b) as being anticipated by 4,567,710 to Reed. The Applicant respectfully traverses the rejections. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987); MPEP § 2131. The Applicant respectfully submits the Reed reference does not disclose each and every element of claims 23 and 26 and thus does not anticipate these claims. The Applicant further submits the inventions recited in claims 23 and 26 are not obvious in view of the Reed reference.

Claim 23 requires the outer muntin grid elements to completely surround the inner muntin grid elements to completely hide the inner muntin grid element from view. The Applicant respectfully submits Reed does not have elements that meet these limitations. The Reed structure cited in the Office Action as anticipating claim 23 has an inner muntin grid element 32 having connectors 9 disposed over its flange ends 33. The Reed connectors 9 do not, in any Reed embodiment, completely surround the entire Reed I-beam structure 32 to hide the I-beam structure from view in the manner required by claim 23. In all of the Reed embodiments, the main web 34 of the Reed I-beam structure 32 is visible from both sides of the Reed window unit. The Reed connectors 9 never hide the main web 34 and thus do not completely surround the inner muntin grid element to hide it from view as required by claim 23. Hiding the inner muntin grid element is an important aspect of the invention because the invention allows the inner muntin grid element is to be roughly formed and unpainted. Reed's connectors 9 do not even hide the end flanges 33 because the considerable space between lips 28 allows the inner portions of the end flanges 33 to be viewed from the opposite sides of the Reed window. Reed thus does not anticipate claim 23 because all of the limitations of claim 23 are not found in the Reed reference. In addition, the

Applicant respectfully submits the invention of claim 23 is not obvious in view of the Reed teachings because Reed does not teach or suggest a configuration wherein the entire inner muntin bar structure is hidden from view.

Claim 26 requires the outer muntin grid element to substantially surround the inner muntin grid element to hide the inner muntin grid element from view on both sides of the insulating glazing unit. Claim 26 also requires the outer muntin grid element to define a longitudinal slit that allows the outer muntin grid element to be opened and wrapped around the inner muntin grid element. The Reed reference does not disclose an outer muntin grid element having these two elements of claim 26. The Office Action cites elements 33, 36, and 35 (which are the flange ends of I-beam 32) as meeting the inner muntin grid element of claim 26. The Applicant submits Reed's inner muntin grid element is the entire I-beam 32 including web 34 – not just the flange ends 33,36,35 of the I-beam 32 as set forth in the Office Action. The Office Action cites connectors 9 in FIGS 13 and 14 as meeting the outer muntin grid element. Figs. 13 and 14 of Reed disclose plastic connectors 9 used to secure the longitudinal edges of the Reed I-beams 32 to the inner surface of the glass. The Reed plastic connectors 9 do not, in any Reed embodiment, substantially surround the entire I-beam 32 to hide the I-beam 32 from view. In all of the Reed embodiments, the main web 34 of the Reed I-beam is always visible from both sides of the window unit. The Reed connectors 9 never hide the main web 34 from view on both sides of the insulating glazing unit. Further, connectors 9 are open (when view in the direction of the #38 lead line of FIG. 14) and thus do not even hide elements 33,36,35 from view. Claim 26 requires the outer muntin grid element to define a slit that allows the outer muntin grid element to be opened and wrapped around the inner muntin grid element. As used in the present specification, a slit is a thin cut or line of separation that allows the ends that define the slit to be disposed back against or adjacent each other when the outer muntin grid element is closed. A slit is used because the outer muntin grid element is used to hide the inner muntin grid element from view. The Applicant respectfully submits Reed does not disclose a slit. The gap between the Reed lips 28 and 30 is not a slit because the Reed lips never close back against each other and thus allow the structure (33,36,35) inside connectors 9 to be

visible when one is viewing connectors 9 through the gap between lips 28 and 30. In view of these differences, the Applicant respectfully submits Reed does not anticipate claim 26 and does not suggest the configuration recited in claim 26.

Claim 30 is not anticipated or obvious in view of Reed and is independently patentable. Claim 30 requires the outer muntin grid element to have at least one protruding foot that increases the width of the outer muntin grid element with the foot protruding in a direction perpendicular to the first and second glass sheets. The Office Action cites the sides 25 of connectors 9 as meeting the protruding foot limitation. The Applicant submits that the sides 25 of connectors 9 cannot be the protruding foot recited in claim 30 because the Office Action has already cited the structure of connector 9 (including sidewall 25) as the structure of the outer muntin grid element recited in claim 23 that surrounds the inner muntin grid element. The Applicant submits Reed does not have the protruding foot recited in claim 30.

B. Claims 24, 25, 36-39, 41-43, 69, and 71-73 are not obvious under 35 U.S.C. § 103(a) over Reed in view of US 5,345,743 to Baier.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestions or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestions to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. M.P.E.P. § 2142.

Claims 24 and 25 depend from claim 23. As described above, the Applicant submits claim 23 is not anticipated by or obvious in view of the Reed reference. The Applicant also respectfully submits claim 23 is not obvious in view of the combination of Reed and Baier. Baier does not disclose an outer muntin grid element configuration that surrounds an inner muntin grid element to hide the inner muntin grid element from

view. As such, claims 24 and 25 are also patentable over the cited combination of references.

Independent claims 36, 39, and 69 are similar to claims 23 and 26 described above because each recites inner and outer muntin grid elements. Claim 36 requires the outer muntin grid element (1) to surround the inner muntin grid element, (2) to be in the form of a collapsible and resilient tube that is capable of being collapsed upon itself and reopened to a tube form, and (3) to define a slit that allows the tube to be wrapped around the inner muntin grid element. Claim 39 requires the outer muntin grid element (1) to be fabricated from a foam material, (2) to be in the form of a tube disposed around the inner muntin grid element to hide the inner muntin grid element from view on both sides of the unit, and (3) to define a slit that allows the tube to be opened and wrapped around the inner grid element. Claim 69 requires the outer muntin grid element to be a unitary tube having a continuous sidewall that encloses a length of the inner muntin grid element to hide the longitudinal edges and longitudinal sides of the enclosed portion of the inner muntin grid element from view on both sides of the insulating glazing unit. The Applicant respectfully submits these claims are not obvious in view of the combination of Reed and Baier. As described above with respect to claims 23 and 26, the Applicant submits the Reed reference does not disclose an outer muntin grid element that surrounds an inner muntin grid element or hides an inner muntin grid element from view. Reed has an inner muntin grid element 32 that has connectors 9 disposed on its ends 33. The connectors 9 do not surround the I-beam inner muntin grid element, are not in the form of a tube, and do not define slits as recited in claims 36, 39, and 69. The addition of the Baier teachings to the Reed reference does not change the analysis. Baier does not disclose tubes, slit tubes, or outer muntin grid elements that surround portions of inner muntin grid elements. The Applicant respectfully submits the cited combination of references does not disclose or suggest all of the limitations of claims 36, 39, and 69. As such, the Applicant submits the inventions defined by these claims are not obvious in view of the cited combination of references.

Claim 42 requires the ends of the outer muntin grid defined by the slit to be angled away from each other. Claim 42 is independently patentable over the cited

combination of references. The Cited Reed and Baier references do not disclose or suggest a slit having ends angled away from each other. Further, the current Office Action does not explain its rejection of claim 42 and does not define any disclosure in the cited references that meet the limitation of claim 42. As such, the Applicant submits claim 42 is patentable over the cited prior art references.

C. Claims 32-33 are not obvious under 35 U.S.C. § 103(a) over Reed.

Claim 33 requires the outer muntin grid elements to be collapsible tubes that are capable of being collapsed upon itself and reopened to a tube form. The Applicant respectfully submits the invention recited in claim 33 is patentable over the Reed disclosures. The Reed device has connectors with open ends that allow the flange 34 of the I-beam 32 to extend out of the connectors. Reed thus does not suggest the use of tubes because tubes could not be used with the Reed device to allow the Reed flange 34 to extend out of the connectors 9. The Office Action does not explain how Reed discloses the tube structure or would be modified by one of ordinary skill in the art to provide the tube structure.

D. Claims 44-46 and 49 and 74 are not obvious under 35 U.S.C. § 103(a) over Reed in view of US Patent 5,351,459 to Kassl et al.

The Office Action supports the rejection of claim 44 by contending that the Reed reference discloses all of the claim limitations "except for the outer muntin grid elements being notched at the lap joints, the body defining one corner notch for each corner of the inner muntin grid element, the corner extending into the body of the outer muntin grid element, the corner being spaced apart to align with the corners of the inner muntin grid element." Claim 44 does not recite "lap joints" and that the rejection appears to have a typographical error regarding the corners that extend into the body of the outer muntin grid element. The Applicant has read this portion of the rejection to mean "corner notches" that extend into the body of the outer muntin grid element and believes the lap joint comments were copied from the rejection of claim 74.

Claim 44 recites the invention of FIGS. 37-42 wherein the outer muntin grid element defines corner notches for at least three of the corners of the inner muntin grid element. The corner notches are spaced apart to align with the corners of the inner muntin grid element when the body is wrapped around the inner muntin grid element. The Reed reference does not disclose or suggest an outer muntin grid body having such corner notches and does not disclose an outer muntin grid element that is wrapped around the inner muntin grid element in this fashion. The Office Action does not identify which structures of Reed meet the spaced corner notch limitations defined in claim 44.

The Office Action cites the Kassl reference as disclosing the outer muntin grid elements being notched at the lap joints. The Applicant does not understand the relevance of this statement to claim 44. Claim 44 does not require lap joints. The Applicant thus submits that the invention of claim 44 is patentable over the combination of Reed and Kassl.

E. Claims 47-48 are not obvious under 35 U.S.C. § 103(a) over Reed in view of US Patent 5,351,459 to Kassl et al. in further view of Baier.

Claims 47 and 48 depend from independent claim 44 and are thus patentable based on the elements recited in claim 44. The addition of the Baier reference to the combined disclosures of Reed and Kassl do not render the invention of claim 44 obvious. Kassl and Baier do not disclose the corner notches required by claim 44. In view of the patentability of claim 44, then the dependent claims are also patentable.

Conclusion

As described in detail above, the Applicant submits the Examiner has failed to establish prima facie cases of anticipation and obviousness. With respect to the anticipation rejection, the Applicant submits the cited reference fails to disclose all of the claim limitations. With respect to the obviousness rejections, the Applicant submits the cited combinations of references fail to disclose or suggest all the claim limitations. The

references The Applicant respectfully requests a decision in favor of the allowability of the claims.

(viii) Claims Appendix

1-22 (Canceled)

23. (Previously presented) A simulated divided lite insulating glazing unit having an internal muntin bar grid; the unit comprising:

first and second spaced glass sheets spaced apart by a perimeter spacer; the first and second glass sheets and spacer defining an insulating chamber;

an internal muntin bar grid disposed inside the insulating chamber; the internal muntin bar grid extending between different portions of the perimeter spacer to divide the insulating chamber into separate lites to provide a divided-lite appearance to the glazing unit; the internal muntin bar grid having a plurality of inner muntin grid elements that each has a longitudinal direction and a plurality of flexible, collapsible outer muntin grid elements that each has a longitudinal direction; the inner muntin grid elements being arranged in a grid that defines the pattern of the internal muntin bar grid;

the outer muntin grid elements surrounding the inner muntin grid elements to completely hide the inner muntin grid elements of the internal muntin bar grid from view; and

when the combined inner and outer muntin grid elements are viewed in a cross section taken perpendicular to the longitudinal direction, the outer muntin grid element completely surrounding the inner muntin grid element.

24. (Previously presented) The unit of claim 23, wherein the outer muntin grid elements are fabricated from a foam material.

25. (Previously presented) The unit of claim 24, wherein the outer muntin grid elements have a desiccant.

26. (Previously presented) A simulated divided lite insulating glazing unit having an internal muntin bar; the unit comprising:

first and second spaced glass sheets spaced apart by a perimeter spacer; the first and second glass sheets and spacer defining an insulating chamber;

an internal muntin bar disposed inside the insulating chamber; the internal muntin bar extending away from the perimeter spacer to divide the insulating chamber into separate portions to provide a divided-lite appearance to the glazing unit;

the internal muntin bar having an inner muntin grid element and a flexible, collapsible outer muntin grid element;

the outer muntin grid element substantially surrounding the inner muntin grid element to hide the inner muntin grid element from view on both sides of the insulating glazing unit;

the outer muntin grid element having a longitudinal direction; the outer muntin grid element defining a longitudinal slit that allows the outer muntin grid element to be opened and wrapped around the inner muntin grid element.

27. (Previously presented) The unit of claim 26, wherein the outer muntin grid element defines opposed longitudinal ends that define the slit; the opposed longitudinal ends being configured to overlap each other to close the slit.

28-29. (Canceled)

30. (Previously presented) The unit of claim 23, wherein at least one of the outer muntin grid elements includes at least one protruding foot that increases the width of the outer muntin grid element; the foot protruding in a direction perpendicular to the first and second glass sheets.

31. (Canceled)

32. (Previously presented) The unit of claim 23, wherein the outer muntin grid elements are resilient.

33. (Previously presented) The unit of claim 23, wherein the outer muntin grid elements are tubes; each collapsible tube being capable of being collapsed upon itself and reopened to a tube form.

34-35. (Canceled)

36. (Previously presented) A simulated divided lite insulating glazing unit having an internal muntin bar; the unit comprising:

- first and second spaced glass sheets spaced apart by a perimeter spacer; the glass sheets and spacer defining an insulating chamber;

- an internal muntin bar disposed inside the insulating chamber; the internal muntin bar extending away from the perimeter spacer to divide the insulating chamber into separate lites to provide a divided-lite appearance to the glazing unit;

- the internal muntin bar having an inner muntin grid element and an outer muntin grid element;

- the outer muntin grid element surrounding the inner muntin grid element; the outer muntin grid element being a collapsible and resilient flexible tube having an inner surface and an outer surface; the collapsible tube being capable of being collapsed upon itself and reopened to a tube form; and

- the tube defining a slit that allows the tube to be wrapped around the inner muntin grid element; the slit extending from the inner surface to the outer surface of the outer muntin grid element.

37. (Previously presented) The unit of claim 36, wherein the outer muntin grid element is fabricated from a foam material.

38. (Previously presented) The unit of claim 37, wherein the foam material includes a desiccant.

39. (Previously presented) A simulated divided lite insulating glazing unit having an internal muntin bar; the unit comprising:

- first and second spaced glass sheets spaced apart by a perimeter spacer; the first and second glass sheets and spacer defining an insulating chamber;

- an internal muntin bar disposed inside the insulating chamber; the internal muntin bar extending away from the perimeter spacer to divide the insulating chamber into separate lites to provide a divided-lite appearance to the glazing unit; the internal muntin bar having:

- an inner muntin grid element;

- an outer muntin grid element having an inner surface and an outer surface;

- the outer muntin grid element being fabricated from a foam material;

- the outer muntin grid element being in the form of a tube disposed around the inner muntin grid element to hide the inner muntin grid element from view on both sides of the unit when the muntin grid piece is installed; and

- the tube having a sidewall and defining a slit that allows the tube to be opened and wrapped around the inner muntin grid element; the slit extending from the inner surface to the outer surface through the sidewall of the tube.

40. (Canceled)

41. (Previously presented) The unit of claim 39, wherein the outer muntin grid element has a desiccant.

42. (Previously presented) The unit of claim 39, wherein the slit in the outer muntin grid element defines opposed ends; the opposed ends being angled away from each other.

43. (Previously presented) The unit of claim 39, wherein the tube is collapsible and resilient.

44. (Previously presented) In combination, an inner muntin grid element and an outer muntin grid element used to form a muntin grid piece in a simulated divided lite window having an insulating chamber; the muntin grid piece being adapted to be disposed within the insulating chamber of the simulated divided lite window; the outer muntin grid element being adapted to fold around the inner muntin grid element; the inner muntin grid element having a longitudinal direction, a plurality of spaced corners and a cross sectional perimeter dimension measured about a cross section viewed normal to the longitudinal direction of the inner muntin grid element; the combination comprising:

- an outer muntin grid element having a body having a width and a longitudinal direction;

- the body having spaced longitudinal ends that define the width of the body;

- the width being substantially equal to the cross sectional perimeter dimension of the inner muntin grid element; and

- the body defining one corner notch for at least three of the corners of the inner muntin grid element, each of the corner notches extending into the body of the outer muntin grid element; the corner notches being spaced apart to align with the corners of the inner muntin grid element when the body is wrapped around the inner muntin grid element.

45. (Previously presented) The combination of claim 44, wherein the body is flexible.

46. (Previously presented) The combination of claim 45, wherein the body is resilient.

47. (Previously presented) The combination of claim 46, wherein the body is fabricated from a foam.

48. (Previously presented) The combination of claim 47, wherein the foam includes a desiccant.

49. (Previously presented) The combination of claim 44, further comprising an adhesive connected to the body; the adhesive adapted to connect the body to the inner muntin grid element when the body is wrapped around the inner muntin grid element.

50-68. (Canceled)

69. (Previously presented) A simulated divided lite insulating glazing unit having an internal muntin bar; the unit comprising:

- first and second spaced glass sheets spaced apart by a perimeter spacer; the first and second glass sheets and spacer defining an insulating chamber;

- an internal muntin bar grid disposed inside the insulating chamber; the internal muntin bar grid dividing the insulating chamber into separate portions to provide a divided-lite appearance to the glazing unit;

- the internal muntin bar grid having a plurality of inner muntin grid elements and a plurality of outer muntin grid elements; the outer muntin grid elements being fabricated from a non-metallic foam material;

- the inner muntin grid elements having at least pairs of longitudinal edges and at least pairs of longitudinal sides;

- the inner muntin grid elements being disposed in a grid arrangement that defines the pattern of the internal muntin bar grid;

- each of the outer muntin grid elements being a unitary tube having a continuous sidewall that encloses a length of an inner muntin grid element longitudinal edges and longitudinal sides to hide the longitudinal edges and longitudinal sides of the enclosed portion of the inner muntin grid element from view on both sides of the insulating glazing unit.

70. (Canceled)

71. (Previously presented) The unit of claim 69, wherein each of the inner muntin grid elements extends between two spaced portions of the perimeter spacer.

72. (Previously presented) The unit of claim 71, wherein the inner muntin grid elements cross each other at lap joints.

73. (Previously presented) The unit of claim 72, wherein the outer muntin grid elements are notched at the lap joints.

74. (Previously presented) The unit of claim 23, wherein the inner muntin grid elements cross each other at lap joints and the outer muntin grid elements are notched at the lap joints.

75. (Canceled)

(ix) Evidence Appendix

None.

(x) Related proceedings

None.